Antibiotic Resistance and Tolerance to Biocides in Enterobacter

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Abstract: The objective of this study was to explore the possible correlation between resistance to antibiotics and tolerance to biocides in Gram-negative bacilli isolated from the University Hospital Center of Tlemcen. This study focused on 175 clinical isolates of Gram-negative bacilli, it is a question of exploring: their level and profile of resistance to antibiotics, their tolerance to biocides, as well as the identification of the genetic supports of this resistance. Enterobacter spp. was the most predominant bacterial genus, all isolates harbored at least one of the studied genes with significant resistance capacity. Our results show, in some cases, a possible positive correlation between the presence of biocide tolerance genes and those of antibiotic resistance; in fact, tolerance to biocides could be one of the co-selection factors for antibiotic resistance. The results of this study should encourage the good practice of hygiene measures as well as the rational use of antimicrobials in order to hinder the development and emergence of resistance in our hospital departments.

Mots clés : Antibiotiques, Biocides, Enterobacter, Hôpital, Résistance,

Keywords: antibiotic, biocides, enterobacter, hospital, resistance

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